

Mr. Van Kessler  
Godfrey Conveyor Company, Inc.  
4310 Middlebury Street  
Elkhart, IN 46516

Re: **039-12158**  
Significant Source Modification to:  
Part 70 permit No.: **T 039-8962-00267**

Dear Mr. Kessler:

Godfrey Conveyor Company, Inc. was issued Part 70 operating permit **T 039-8962-00267** on March 31, 2000, for a fiberglass and aluminum boat manufacturing operation. An application to modify the source was received on April 11, 2000. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for construction at the source:

- (a) Six (6) fiberglass chop stations identified as chop6-10, chop6-11, chop6-12, chop6-13, chop6-14, and chop6-15, each with a maximum capacity of 535 pounds of resin per hour, all exhausting through three (3) stacks known as EF6-14, EF6-15 and EF6-16.
- (b) Two (2) gel coat booths identified as gel6-02 and gel6-03, with a maximum capacity of 496 pounds of gel coat per hour, utilizing air assisted airless guns, and exhausting to stacks EF6-12 and EF6-13.

The following construction conditions are applicable to the proposed project:

General Construction Conditions

- 1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Management (OAM).
- 2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
- 3. Effective Date of the Permit  
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.
- 4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(i), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.
6. Pursuant to 326 IAC 2-7-10.5(l) the emission units constructed under this approval shall not be placed into operation prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.

The proposed operating conditions applicable to these emission units are attached to this Source Modification approval. These proposed operating conditions shall be incorporated into the Part 70 operating permit as an administrative amendment in accordance with 326 IAC 2-7-10.5(l)(1) and 326 IAC 2-7-11.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter contact Patrick T. Brennan, c/o OAM, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, at 631-691-3395 or in Indiana at 1-800-451-6027 (ext 631-691-3395).

Sincerely,

Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Management

Attachments

PTB/MES

cc: File - Elkhart County  
U.S. EPA, Region V  
Elkhart County Health Department  
Northern Regional Office  
Air Compliance Section Inspector - Paul Karkiewicz  
Compliance Data Section - Karen Nowak  
Administrative and Development - Janet Mobley  
Technical Support and Modeling - Michele Boner

## **PART 70 OPERATING PERMIT OFFICE OF AIR MANAGEMENT**

**Godfrey Conveyor Company, Inc. (Godfrey Marine)  
4310 Middlebury Street  
Elkhart, Indiana 46516**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T039-8962-00267	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date: March 31, 2000
<hr/>	
First Significant Source Modification No. 039-12158	Pages Affected: 4, 30, 31, 40
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

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**Quarterly Report**

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## SECTION A

## SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

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The Permittee owns and operates a stationary fiberglass and aluminum boat manufacturing operation.

Responsible Official: Van Kessler  
Source Address: 4310 Middlebury Street, Elkhart, Indiana 46516  
Mailing Address: 4310 Middlebury Street, Elkhart, Indiana 46516  
SIC Code: 3732  
County Location: Elkhart  
County Status: Attainment for all criteria pollutants  
Source Status: Part 70 Permit Program  
Minor Source, under PSD Rules;  
Major Source, Section 112 of the Clean Air Act

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

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This stationary source consists of the following emission units and pollution control devices:

- (1) One (1) fiberglass application area located in Plant 6, consisting of three (3) gel coat booths, identified as gel6-01, gel6-02 and gel6-03, each with a maximum capacity of 496 pounds of gel coat per hour, utilizing air-assisted airless spray guns, and exhausting to three (3) stacks, identified as EF6-1, EF6-12 and EF6-13, and thirteen (13) fiberglass chop stations, identified as chop6-01, chop6-02, chop6-03, chop6-04, chop6-05, chop6-06, chop6-07, chop6-10, chop6-11, chop6-12, chop6-13, chop6-14 and chop6-15, each with a maximum capacity of 525 pounds of resin per hour, utilizing flowcoating, all exhausting to nine (9) stacks, identified as EF6-4, EF6-5, EF6-6, EF6-7, EF6-8, EF6-9, EF6-14, EF6-15 and EF6-16.
- (2) One (1) fiberglass application area used for the production of master boat molds, located in Plant 9, consisting of one (1) gel coat booth, identified as gel9-01, with a maximum capacity of 496 pounds of gel coat per hour, utilizing air-assisted airless spray guns (HVLP-F), exhausting to one (1) stack, identified as EF9-1 and one (1) fiberglass chop booth, identified as chop9-01, with a maximum capacity of 525 pounds of resin per hour, utilizing flowcoating, exhausting to one (1) stack, identified as EF9-2.
- (3) One (1) grinding booth, located in Plant 6, with a maximum capacity of 543 pounds of flange material processed per hour, equipped with dry filters for particulate matter control, exhausting to two (2) stacks, identified as EF6-2 and EF6-3.
- (4) Four (4) woodworking machines, located in Plant 7, with a total maximum throughput of 729 pounds per hour, with one (1) cyclone for particulate matter control, exhausting to the atmosphere.

## SECTION D.1

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]

- (1) One (1) fiberglass application area located in Plant 6, consisting of three (3) gel coat booths, identified as gel6-01, gel6-02 and gel6-03, each with a maximum capacity of 496 pounds of gel coat per hour, utilizing air-assisted airless spray guns, and exhausting to three (3) stacks, identified as EF6-1, EF6-12 and EF6-13, and thirteen (13) fiberglass chop stations, identified as chop6-01, chop6-02, chop6-03, chop6-04, chop6-05, chop6-06, chop6-07, chop6-10, chop6-11, chop6-12, chop6-13, chop6-14 and chop6-15, each with a maximum capacity of 525 pounds of resin per hour, utilizing flowcoating, all exhausting to nine (9) stacks, identified as EF6-4, EF6-5, EF6-6, EF6-7, EF6-8, EF6-9, EF6-14, EF6-15 and EF6-16.
- (2) One (1) fiberglass application area used for the production of master boat molds, located in Plant 9, consisting of one (1) gel coat booth, identified as gel9-01, with a maximum capacity of 496 pounds of gel coat per hour, utilizing air-assisted airless spray guns (HVLP-F), exhausting to one (1) stack, identified as EF9-1 and one (1) fiberglass chop booth, identified as chop9-01, with a maximum capacity of 525 pounds of resin per hour, utilizing flowcoating, exhausting to one (1) stack, identified as EF9-2.
- (3) One (1) grinding booth, located in Plant 6, with a maximum capacity of 543 pounds of flange material processed per hour, equipped with dry filters for particulate matter control, exhausting to two (2) stacks, identified as EF6-2 and EF6-3.
- (4) Four (4) woodworking machines, located in Plant 7, with a total maximum throughput of 729 pounds per hour, with one (1) cyclone for particulate matter control, exhausting to the atmosphere.
- (5) One (1) bilge painting process, located in Plant 6 in the general laminating department, utilizing one (1) air assisted airless spray gun (HVLP-F), with a maximum capacity of 21 units per hour, exhausting to one (1) stack, identified as EF6-9.
- (6) One (1) insignificant degreasing operation that does not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.1.1 Prevention of Significant Deterioration (PSD Rules) [326 IAC 2-2] [40 CFR 52.21]

- (a) The total source potential to emit VOCs is limited to less than 250 tons per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.
- (b) Any change or modification which may increase the potential to emit of VOCs or any other criteria pollutant to 250 tons per year or greater, from the equipment covered in this permit, shall require prior approval from IDEM, OAM before such change may occur.

#### D.1.2 General Reduction Requirements for New Facilities [326 IAC 8-1-6]

- (a) The one (1) bilge painting process, located in Plant 6 in the general laminating department, shall be limited to less than fifteen (15) tons of VOC per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 8-1-6 will not apply.

- (b) The one (1) fiberglass application area used for the production of master boat molds, located in Plant 9, consisting of gel9-01 and chop9-01, shall be limited to less than ten (10) tons VOC per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 8-1-6 will not apply.
- (c) Pursuant to 326 IAC 8-1-6, Best Available Control Technology for the fiberglass application area located in Plant 6, shall be the following:
  - (1) Use of resins and gel coats that contain styrene shall be limited such that the potential to emit (PTE) VOCs for the fiberglass application area located in Plant 6, consisting of gel6-01, gel6-02 and gel6-03 and chop6-01, chop6-02, chop6-03, chop6-04, chop6-05, chop6-06, chop6-07, chop6-10, chop6-11, chop6-12, chop6-13, chop6-14 and chop6-15 shall be less than 220 tons per twelve (12) consecutive month period. Compliance with this limit shall be determined based upon the following criteria:
    - (A) VOC emissions from the application of gel coat and resins shall be calculated as volatile organic HAP emissions. Monthly usage by weight, weight percent content of all monomers that are volatile organic HAP, method of application, and other emission reduction techniques for each gel coat and resin shall be recorded. Volatile organic HAP emissions shall be calculated by multiplying the usage of each gel coat and resin by the emission factor that is appropriate for the HAP monomer content, method of application, and other emission reduction techniques for each gel coat and resin, and summing the emissions for all gel coats and resins. Emission factors shall be obtained from the reference approved by IDEM, OAM.
    - (B) The emission factors approved for use by IDEM, OAM shall be taken from the following reference: "Unified Emission Factors for Open Molding of Composites", Composites Fabricators Associations, April 20, 1999, with the exception of the emission factors for controlled spray application. This reference is included with this permit. For HAP-emitting operations not addressed by this reference, emission factors shall be taken from U.S. EPA's AP-42 document. For the purposes of these emission calculations, HAP monomer in resins and gel coats that is not styrene or methyl methacrylate shall be considered as styrene on an equivalent weight basis.
  - (2) The total monomer contents of all resins and gel coats used shall be limited to 35 percent (35%) by weight for resins, 37 percent (37%) by weight for gel coats or their equivalent on an emissions mass basis. HAP monomer contents shall be calculated on a neat basis, which means excluding any filler. Compliance with these HAP monomer content limits shall be demonstrated on a monthly basis.

The use of resins with HAP monomer contents lower than 35%, gel coats with HAP monomer contents lower than 37%, and/or additional emission reduction techniques approved by IDEM, OAM, may be used to offset the use of resins with HAP monomer contents higher than 35%, and/or gel coats with HAP monomer contents higher than 37%. This is allowed to meet the HAP monomer content limits for resins and gel coats, and shall be calculated on an equivalent emissions mass basis as shown below:



**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT  
COMPLIANCE DATA SECTION**

**Part 70 Quarterly Report**

Source Name: Godfrey Conveyor Company, Inc. (Godfrey Marine)  
Source Address: 4310 Middlebury Street, Elkhart, Indiana 46516  
Mailing Address: 4310 Middlebury Street, Elkhart, Indiana 46516  
Part 70 Permit No.: T039-8962-000267  
Facility: gel6-01, gel6-02 and gel6-03 and chop6-01, chop6-02, chop6-03, chop6-04, chop6-05, chop6-06, chop6-07, chop6-10, chop6-11, chop6-12, chop6-13, chop6-14 and chop6-15  
Parameter: VOC  
Limit: PTE less than 220 tons per twelve (12) consecutive month period

YEAR: \_\_\_\_\_

Month	VOC Usage/Emissions (tons/month)	VOC Usage/Emissions Previous 11 Months (tons)	VOC Usage/Emissions 12 Month Total (tons)
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.  
Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_  
Title / Position: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

## Indiana Department of Environmental Management Office of Air Management

### Addendum to the Technical Support Document for a Significant Source Modification to a Part 70 Operating Permit

Source Name:	Godfrey Conveyor Company, Inc.
Source Location:	4310 Middlebury Street, Elkhart, Indiana 46516
County:	Elkhart
Operation Permit No.:	T 039-8962-00267
Significant Source Modification No.:	039-12158-00267
SIC Code:	3732
Permit Reviewer:	Patrick T. Brennan

On June 16, 2000, the Office of Air Management (OAM) had a notice published in the Elkhart Truth, Elkhart, Indiana, stating that Godfrey Conveyor Company, Inc. had applied for a Significant Source Modification to a Part 70 Operating Permit to construct six (6) fiberglass chop stations and two (2) gel coat booths at its fiberglass and aluminum boat manufacturing source, with dry filters for air pollution control. The notice also stated that OAM proposed to issue a Significant Source Modification and provided information on how the public could review the proposed Significant Source Modification and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this Significant Source Modification to a Part 70 Operating Permit should be issued as proposed.

On July 14, 2000, Terry Schenk, a consultant for the applicant, submitted verbal comments on the proposed Significant Source Modification to the Part 70 Operating Permit. The comments are as follows: The permit language, if changed, has deleted language as ~~strikeouts~~ and new language **bolded**.

#### Comment 1:

The facility description box in Section D.1 does not contain wording stating that the information is descriptive and does not constitute enforceable conditions.

#### Response 1:

The facility description box in Section D.1 has been revised as follows:

## SECTION D.1

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]

- (1) One (1) fiberglass application area located in Plant 6, consisting of three (3) gel coat booths, identified as gel6-01, gel6-02 and gel6-03, each with a maximum capacity of 496 pounds of gel coat per hour, utilizing air-assisted airless spray guns, and exhausting to three (3) stacks, identified as EF6-1, EF6-12 and EF6-13, and thirteen (13) fiberglass chop stations, identified as chop6-01, chop6-02, chop6-03, chop6-04, chop6-05, chop6-06, chop6-07, chop6-10, chop6-11, chop6-12, chop6-13, chop6-14 and chop6-15, each with a maximum capacity of 525 pounds of resin per hour, utilizing flowcoating, all exhausting to nine (9) stacks, identified as EF6-4, EF6-5, EF6-6, EF6-7, EF6-8, EF6-9, EF6-14, EF6-15 and EF6-16.
- (2) One (1) fiberglass application area used for the production of master boat molds, located in Plant 9, consisting of one (1) gel coat booth, identified as gel9-01, with a maximum capacity of 496 pounds of gel coat per hour, utilizing air-assisted airless spray guns (HVLP-F), exhausting to one (1) stack, identified as EF9-1 and one (1) fiberglass chop booth, identified as chop9-01, with a maximum capacity of 525 pounds of resin per hour, utilizing flowcoating, exhausting to one (1) stack, identified as EF9-2.
- (3) One (1) grinding booth, located in Plant 6, with a maximum capacity of 543 pounds of flange material processed per hour, equipped with dry filters for particulate matter control, exhausting to two (2) stacks, identified as EF6-2 and EF6-3.
- (4) Four (4) woodworking machines, located in Plant 7, with a total maximum throughput of 729 pounds per hour, with one (1) cyclone for particulate matter control, exhausting to the atmosphere.
- (5) One (1) bilge painting process, located in Plant 6 in the general laminating department, utilizing one (1) air assisted airless spray gun (HVLP-F), with a maximum capacity of 21 units per hour, exhausting to one (1) stack, identified as EF6-9.
- (6) One (1) insignificant degreasing operation that does not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.

**(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)**

## **Indiana Department of Environmental Management Office of Air Management**

### **Technical Support Document (TSD) for a Part 70 Significant Source Modification**

#### **Source Background and Description**

<b>Source Name:</b>	<b>Godfrey Conveyor Company, Inc.</b>
<b>Source Location:</b>	<b>4310 Middlebury Street, Elkhart, Indiana 46516</b>
<b>County:</b>	<b>Elkhart</b>
<b>SIC Code:</b>	<b>3732</b>
<b>Operation Permit No.:</b>	<b>T 039-8962-00267</b>
<b>Operation Permit Issuance Date:</b>	<b>March 31, 2000</b>
<b>Significant Source Modification No.:</b>	<b>039-12158-00267</b>
<b>Permit Reviewer:</b>	<b>Patrick T. Brennan</b>

The Office of Air Management (OAM) has reviewed a modification application from Godfrey Conveyor Company, Inc. relating to the construction of the following emission units and pollution control devices at Plant 6:

#### **Significant Emission Units**

- (a) Six (6) fiberglass chop stations identified as chop6-10, chop6-11, chop6-12, chop6-13, chop6-14, and chop6-15, each with a maximum capacity of 535 pounds of resin per hour, all exhausting through three (3) stacks known as EF6-14, EF6-15 and EF6-16.
- (b) Two (2) gel coat booths identified as gel6-02 and gel6-03, with a maximum capacity of 496 pounds of gel coat per hour, utilizing air assisted airless guns, and exhausting to stacks EF6-12 and EF6-13.

#### **Insignificant Activities**

- (a) One (1) natural gas-fired air make up unit with a heat input capacity of 5.0 MMBtu per hour.

#### **History**

On April 11, 2000, Godfrey Conveyor Company, Inc. submitted an application to the OAM requesting to add additional gelcoat booths and chop gun stations. This new equipment will allow for a capacity increase from 73 to 88 boats per week at their fiberglass boat manufacturing operation in Plant 6. The capacity increase will cause a substantial increase in potential VOC emissions, but actual VOC emissions will still remain within the existing 220 ton per BACT limit for this facility. Godfrey Conveyor Company was issued a Part 70 permit on March 31, 2000. This application will be treated as a significant source modification.

#### **Enforcement Issue**

There are no enforcement actions pending.

### Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (EF)
EF6-12 - Vertical	Gelcoat Guns	30.0	3.0	31,531	70
EF6-13 - Vertical	Gelcoat Guns	30.0	3.0	31,531	70
EF6-14 - Horizontal	Flow Chop Guns	22.0	2.0	9,110	70
EF6-15 - Horizontal	Flow Chop Guns	22.0	2.0	9,110	70
EF6-16 - Horizontal	Flow Chop Guns	22.0	2.0	9,110	70

### Recommendation

The staff recommends to the Commissioner that the Part 70 Significant Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on April 11, 2000.

### Emission Calculations

See pages 1 and 2 of 2 of Appendix A of this document for detailed emissions calculations. The applicant has submitted a number of possible resins and gelcoats that may be used, according to customer preferences, but has also agreed to meet styrene content limits of 35% for resins and 37% for gelcoats, averaged on a monthly basis, as part of the BACT determination. The emissions calculations in Appendix A are based upon the maximum styrene content allowed under the BACT determination.

### Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	280
PM <sub>10</sub>	280
SO <sub>2</sub>	0.0
VOC	195
CO	0.0
NO <sub>x</sub>	0.0

HAPs	Potential To Emit (tons/year)
Styrene	176.2
Methyl Methacrylate	18.8
Total	195

#### Justification for Modification

The Part 70 Operating permit is being modified through a Part 70 Significant Source Modification. This modification is being performed pursuant to 326 IAC 2-7-10.5(f)(4) since the potential to emit of VOC and PM<sub>10</sub> are greater than twenty-five (25) tons per year, and the potential to emit of a single HAP is greater than 10 tons per year.

#### County Attainment Status

The source is located in Elkhart County.

Pollutant	Status
PM <sub>10</sub>	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	maintenance
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO<sub>x</sub>) are precursors for the formation of ozone. Therefore, VOC and NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to the ozone standards. Elkhart County has been designated as maintenance or unclassifiable for ozone. Therefore, VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

- (b) Elkhart County has been classified as attainment or unclassifiable for the remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

### Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	less than 100
PM <sub>10</sub>	less than 100
SO <sub>2</sub>	less than 100
VOC	less than 250
CO	less than 100
NO <sub>x</sub>	less than 100

- (a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the 28 listed source categories.
- (b) These emissions are taken from the Technical Support Document of the Part 70 permit for the source, T039-8962-00267, issued March 31, 2000.

### Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

	Potential to Emit (tons/year)						
Process/facility	PM	PM <sub>10</sub>	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs
Proposed Modification	4.24	4.24	0.0	195	0.0	0.0	195
PSD Threshold Level	250	250	250	250	250	250	-

This modification to an existing minor stationary source is not major because the emission increase is less than the PSD threshold levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

### Potential to Emit of the Entire Source After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification. The source is currently operating under three separate VOC limits as specified in the Part 70 permit. The existing VOC limit for the Plant 6 fiberglass operations is less than 220 tons per twelve (12) consecutive month period. The new production being added to Plant 6 under this significant source modification will continue to operate within this limit.

	Potential to Emit (tons/year)						
Process/facility	PM	PM <sub>10</sub>	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs
Plant 6, Fiberglass Operations				less than 220			
Plant 6 Bilge Painting Operation				less than 10			
Plant 9 Fiberglass Operations				less than 15			
Insignificant Activities				less than 5			
Entire Source	less than 250	less than 250	less than 250	less than 250	less than 250	less than 250	-

The modified source will continue to be minor because the potential to emit of all criteria pollutants will remain below 250 tons per year. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

### Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this proposed modification.

### State Rule Applicability - Individual Facilities

#### 326 IAC 6-3-2 (Process Operations)

- (a) The particulate matter (PM) emissions from the grinding booth will be limited to 1.71 pounds per hour when operating at a process weight rate 543 pounds per hour. Since potential PM emissions after control by the dry filters are 0.17 pounds per hour, the grinding operations will comply with this rule.

The pounds per hour limitation was calculated from the following equation.

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour, and  
P = process weight rate in tons per hour.



$$E = 4.10 (0.272 \text{ tons/hr})^{0.67} = 1.71 \text{ pounds per hour.}$$

Compliance will be demonstrated by operating the dry filters at all times when the grinding is taking place.

- (b) The particulate matter (PM) emissions from the fiberglass product production facilities shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour, and} \\ P = \text{process weight rate in tons per hour.}$$

Compliance will be demonstrated by operating the dry filters at all times when the fiberglass product production facilities are in operation.

#### 326 IAC 2-4.1-1 (New Source Toxics Control)

Since this new source has a potential to emit greater than 10 tons per year of any single HAP and 25 tons per year of any combination of HAPs, the requirements of 326 IAC 2-4.1-1 may apply. However, OAM has determined that the proposed new equipment is an expansion of an existing facility, and is not a new facility. Therefore, 326 IAC 2-4.1-1 is not applicable.

#### 326 IAC 8-1-6 (General Reduction Requirements for New Facilities)

326 IAC 8-1-6 is applicable to all of the Plant 6 fiberglass operations. The existing facilities, consisting of gel coat booth gel6-01, and chop stations chop6-01, chop6-02, chop6-03, chop6-04, chop6-05, chop6-06, and chop6-07, are currently operating under a VOC limit of 220 tons per consecutive twelve (12) month period, as part of the current Best Available Control Technology (BACT) determination. The applicant has stated that the additional gel coat booths, identified as gel6-02 and gel6-03, and the additional chop stations, identified as chop6-10, chop6-11, chop6-12, chop6-13, chop6-14, and chop6-15, as well as the capacity increase from 73 to 88 boats per week, will continue to operate under the existing BACT limit.

The revised BACT determination for the Plant 6 fiberglass operations is as follows:

- (a) Use of gel coats and resins that contain styrene shall be limited such that the potential to emit (PTE) VOCs for the fiberglass application area located in Plant 6, consisting of gel coat booths gel6-01, gel6-02 and gel6-03, and chop stations chop6-01, chop6-02, chop6-03, chop6-04, chop6-05, chop6-06, chop6-07, chop6-10, chop6-11, chop6-12, chop6-13, chop6-14, and chop6-15, shall be less than 220 tons per twelve (12) consecutive month period. Compliance with this limit shall be determined based upon the following criteria:

- (1) VOC emissions from the application of gel coats and resins shall be calculated as volatile organic HAP emissions. Monthly usage by weight, weight percent content of all monomers that are volatile organic HAP, method of application, and other emission reduction techniques for each gel coat and resin shall be recorded. Volatile organic HAP emissions shall be calculated by multiplying the usage of each gel coat and resin by the emission factor that is appropriate for the HAP monomer content, method of application, and other emission reduction techniques for each gel coat and resin, and summing the emissions for all gel coats and resins. Emission factors shall be obtained from the reference approved by IDEM, OAM.
  - (2) The emission factors approved for use by IDEM, OAM shall be taken from the following reference: "Unified Emission Factors for Open Molding of Composites," Composites Fabricators Associations, April 20, 1999, with the exception of the emission factors for controlled spray application. This reference is included with this permit. For HAP-emitting operations not addressed by this reference, emission factors shall be taken from U.S. EPA's AP-42 document. For the purposes of these emission calculations, HAP monomer in resins and gel coats that is not styrene or methyl methacrylate shall be considered as styrene on an equivalent weight basis.
- (b) The total monomer contents of all resins and gel coats used shall be limited to 35 percent (35%) by weight for resins, 37 percent (37%) by weight for gel coats or their equivalent on an emissions mass basis.
- (1) HAP monomer contents shall be calculated on a neat basis, which means excluding any filler.
  - (2) Compliance with these HAP monomer content limits shall be demonstrated on a monthly basis.
  - (3) The use of resins with HAP monomer contents lower than 35%, gel coats with HAP monomer contents lower than 37%, and/or additional emission reduction techniques approved by IDEM, OAM, may be used to offset the use of resins with HAP monomer contents higher than 35%, and/or gel coats with HAP monomer contents higher than 37%. This is allowed to meet the HAP monomer content limits for resins and gel coats, and shall be calculated on an equivalent emissions mass basis as shown below:  
  
$$(\text{Emissions from } >35\% \text{ resin or } >37\% \text{ gel coat}) - (\text{Emissions from } 35\% \text{ resin or } 37\% \text{ gel coat}) \div (\text{Emissions from } 35\% \text{ resin or } 37\% \text{ gel coat}) - (\text{Emissions from } >35\% \text{ resin, } >37\% \text{ gel coat, and/or using other emission reduction techniques}).$$
  
  
Where: Emissions, lb or ton = M (mass of resin or gel coat used, lb or ton) \*  
EF (HAP monomer emission factor for resin or gel coat used, %);  
  
EF, HAP monomer emission factor = emission factor, expressed as pounds (lbs) HAP emitted per ton of resin/gel coat processed, which is indicated by the HAP monomer content, method of application, and other emission reduction techniques for each gel coat and resin used.
- (c) Non-atomized spray application technology shall be used to mechanically apply unfilled production resins. Non-atomized spray application technology includes flow coaters, flow choppers, pressure-fed rollers, or other non-spray mechanical applications of a design and specifications approved by IDEM, OAM.

If it is not possible to apply a portion of unfilled resins with non-atomized spray application technology, equivalent emissions reductions must be obtained via use of other emission reduction techniques. Examples of other emission reduction techniques include, but are not limited to, lower HAP monomer content resins and gel coats, closed molding, vapor suppression, vacuum bagging/bonding, or installing a control device.

- (d) Optimized spray techniques according to a manner approved by IDEM, OAM shall be used for gel coats and filled resins at all times. Optimized spray techniques include, but are not limited to, the use of airless, air-assisted airless, high volume low pressure (HVLP), or other spray applicators demonstrated to the satisfaction of IDEM, OAM, to be equivalent to the spray applicators listed above.

HVLP spray is the technology used to apply material to substrate by means of application equipment that operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

- (e) A one (1) quart, air-atomized spray gun may be used as needed for touch-up purposes only.

- (f) The listed work practices shall be followed:

- (1) To the extent possible, a non-VOC, non-HAP solvent shall be used for cleanup.
- (2) For VOC- and/or HAP-containing materials:
  - (A) Cleanup solvent containers shall be used to transport solvent from drums to work.
  - (B) Cleanup stations shall be closed containers having soft gasketed spring-loaded closures and shall be kept completely closed when not in use.
  - (C) Cleanup rags saturated with solvent shall be stored, transported, and disposed of in containers that are closed tightly.
  - (D) The spray guns used shall be the type that can be cleaned without the need for spraying the solvent into the air.
  - (E) All solvent sprayed during cleanup or resin changes shall be directed into containers. Such containers shall be closed as soon as solvent spraying is complete and the waste solvent shall be disposed of in such a manner that evaporation is minimized.
  - (F) Storage containers shall be kept covered when not in use.

## Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

- (a) The cyclone for PM control shall be in operation at all times when the four (4) woodworking machines are in operation.
- (b) The dry filters for PM control shall be in operation at all times when the fiberglass operations and grinding booth are in operation.
- (c) Weekly inspections shall be performed to verify the placement, integrity and particle loading of the filters. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (d) Monthly inspections shall be performed of the coating emissions from the stacks and the presence of overspray on the rooftops and the nearby ground, weather permitting. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (e) Weekly visible emission notations of the fiberglass facilities' stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
  - (1) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
  - (2) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
  - (3) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
  - (4) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.
- (f) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

These monitoring conditions are necessary because the cyclone for woodworking operations and the dry filters for the fiberglass and grinding operations surface coating operations must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-2 (PSD).

### Proposed Changes

The permit language is changed to read as follows (deleted language appears as ~~strikeouts~~, new language appears in **bold**):

1. The equipment list on page 4 has been revised to contain the new gel coat booths, chop stations and grinding booth capacity.

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]  
[326 IAC 2-7-5(15)]

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This stationary source consists of the following emission units and pollution control devices:

- (1) One (1) fiberglass application area located in Plant 6, consisting of **three (3)** ~~one (1)~~ gel coat booths, identified as gel6-01, **gel6-02 and gel6-03**, each with a maximum capacity of 496 pounds of gel coat per hour, utilizing air-assisted airless spray guns (~~HVLP-F~~), and exhausting to three (3) ~~one (1)~~ stacks, identified as EF6-1, **EF6-12 and EF6-13**, and **thirteen (13)** ~~seven (7)~~ fiberglass chop stations, identified as chop6-01, chop6-02, chop6-03, chop6-04, chop6-05, chop6-06, ~~and chop6-07~~, **chop6-10, chop6-11, chop6-12, chop6-13, chop6-14 and chop6-15**, each with a maximum capacity of 525 pounds of resin per hour, utilizing flowcoating, all exhausting to **nine (9)** ~~six (6)~~ stacks, identified as EF6-4, EF6-5, EF6-6, EF6-7, EF6-8 and EF6-9, **EF6-14, EF6-15 and EF6-16**.
  - (3) One (1) grinding booth, located in Plant 6, with a maximum capacity of **543** ~~450~~ pounds of flange material processed per hour, equipped with dry filters for particulate matter control, exhausting to two (2) stacks, identified as EF6-2 and EF6-3.
2. The equipment list in Section D.1 has been revised to contain the new gel coat booths, chop stations and grinding booth capacity.

## SECTION D.1

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]

- (1) One (1) fiberglass application area located in Plant 6, consisting of **three (3)** ~~one (1)~~ gel coat booths, identified as gel6-01, **gel6-02 and gel6-03**, each with a maximum capacity of 496 pounds of gel coat per hour, utilizing air-assisted airless spray guns (~~HVLP-F~~), and exhausting to three (3) ~~one (1)~~ stacks, identified as EF6-1, **EF6-12 and EF6-13**, and **thirteen (13)** ~~seven (7)~~ fiberglass chop stations, identified as chop6-01, chop6-02, chop6-03, chop6-04, chop6-05, chop6-06, ~~and~~ chop6-07, **cop6-10, chop6-11, chop6-12, chop6-13, chop6-14 and chop6-15**, each with a maximum capacity of 525 pounds of resin per hour, utilizing flowcoating, all exhausting to **nine (9)** ~~six (6)~~ stacks, identified as EF6-4, EF6-5, EF6-6, EF6-7, EF6-8 ~~and~~ EF6-9, **EF6-14, EF6-15 and EF6-16**.
- (3) One (1) grinding booth, located in Plant 6, with a maximum capacity of **543** ~~450~~ pounds of flange material processed per hour, equipped with dry filters for particulate matter control, exhausting to two (2) stacks, identified as EF6-2 and EF6-3.

3. The new gelcoat booths and chop stations have been added to the Best Available Control Technology (BACT) determination for the Plant 6 fiberglass operations in Condition D.1.2 (c)(1) as follows:

- (c) Pursuant to 326 IAC 8-1-6, Best Available Control Technology for the fiberglass application area located in Plant 6, shall be the following:

- (1) Use of resins and gel coats that contain styrene shall be limited such that the potential to emit (PTE) VOCs for the fiberglass application area located in Plant 6, consisting of gel6-01, **gel6-02 and gel6-03** and chop6-01, **chop6-02, chop6-03, chop6-04, chop6-05, chop6-06, and chop6-07, cop6-10, chop6-11, chop6-12, chop6-13, chop6-14 and chop6-15** shall be less than 220 tons per twelve (12) consecutive month period. Compliance with this limit shall be determined based upon the following criteria:

4. The facilities list on the Quarterly Reporting Form for VOC emissions from Plant 6 fiberglass operations on page 40 of 43 has been revised as follows:

Facility: gel6-01, **gel6-02 and gel6-03** and chop6-01, chop6-02, chop6-03, chop6-04, chop6-05, chop6-06, ~~and~~ chop6-07, **cop6-10, chop6-11, chop6-12, chop6-13, chop6-14 and chop6-15**

## Conclusion

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 039-12158-00267.

**Company Name:** Godfrey Conveyor Company, Inc.  
**Address City IN Zip:** 4310 Middlebury Street, Elkhart, Indiana 46516  
**SSM:** 039-12158  
**Plt ID:** 039-00267  
**Reviewer:** Patrick Brennan/MES  
**Date:** April 11, 2000

**Note: Because All VOCs are HAPs, VOC and HAPs calculations are combined into one spreadsheet**

Potential VOC Pounds per Hour = Density (lb/gal) \* Gal of Material (gal/unit) \* Maximum (unit/hr) \* Emission factor (lb/ton) \* (1 ton/2000 lbs)

Potential VOC Pounds per Day = Density (lb/gal) \* Gal of Material (gal/unit) \* Maximum (unit/hr) \* (24 hrs / 1 day) \* Emission factor (lb/ton) \* (1 ton/2000 lbs)

Potential VOC Tons per Year = Density (lb/gal) \* Gal of Material (gal/unit) \* Maximum (unit/hr) \* (8760 hr/yr) \* (1 ton / 2000 lbs) \* Emission factor (lb/ton) \* (1 ton/2000 lbs)

Particulate Potential Tons per Year = (units/hour) \* (gal/unit) \* (lbs/gal) \* (1 - Weight % Volatiles) \* (1 - Transfer efficiency) \* (8760 hr/yr) \* (1 ton / 2000 lbs)

Total = Sum of all worst case coatings and solvents used

Emission Factor ( lbs VOC/ton) taken from "Unified Emission Factors for Open Molding of Composites", Composite Fabricators Association (CFA), April 1999

**Appendix A: Emission Calculations  
Grinding Operations**

**Company Name: Godfrey Conveyor Company, Inc.**  
**Address City IN Zip: 4310 Middlebury Street, Elkhart, Indiana 46516**  
**SSM: 039-12158**  
**Plt ID: 039-00267**  
**Reviewer: Patrick Brennan/MES**  
**Date: April 11, 2000**

Control Efficiency\*

98.5%

Emission Rates at the new source.

Plant 6 Grinding Booth	Process Weight (lbs/hr)	Potential Emissions from similar source (tons PM/ yr)	Process weight rate from similar source (lbs/hr)	Emission Factor (lbs PM /lb grinded)	PM Emission Rate before Controls (lbs/hr)	PM Emission Rate before Controls (tons/yr)	PM Emission Rate after Controls (lb/hr)	PM Emission Rate after Controls (tons/yr)
Existing	450	8.76	420	0.0048	2.14	9.4	0.032	0.141
Increase	92.5	8.76	420	0.0048	0.44	1.9	0.007	0.029
<b>Total</b>	<b>542.5</b>				<b>2.58</b>	<b>11.3</b>	<b>0.039</b>	<b>0.170</b>

**Methodology**

Emission Factor in lbs of PM/ lbs grinded = PM potential emissions of the similar Global Glass, Inc. source (tons /yr) \* (2000 lbs/ton / 8760 hrs/yr) / process weight rate of similar source (lbs /hr)

Emission Rate at new source before controls in lbs/hr = process weight rate (lbs/hr) \* Emission Factor (lbs of PM /lb grinded)

Emission Rate in lbs/hr (after controls) = Emission Rate (before controls) \* (1-control efficiency)

Emission Rate in tons/yr = (lbs/hr) (8760 hr/yr) (ton/2000 lb)

**Allowable Rate of Emissions**

Facility	Process Weight Rate (lbs/hr)	Process Weight Rate (tons/hr)	Allowable Emissions (lbs/hr)	Maximum Allowable Emissions (tons/yr)
Grinding Booth	542.5	0.271	1.71	7.5

**Methodology**

Allowable Emissions = 4.10(Process Weight Rate)<sup>0.67</sup>